

W Y O M I N G CAREERS®

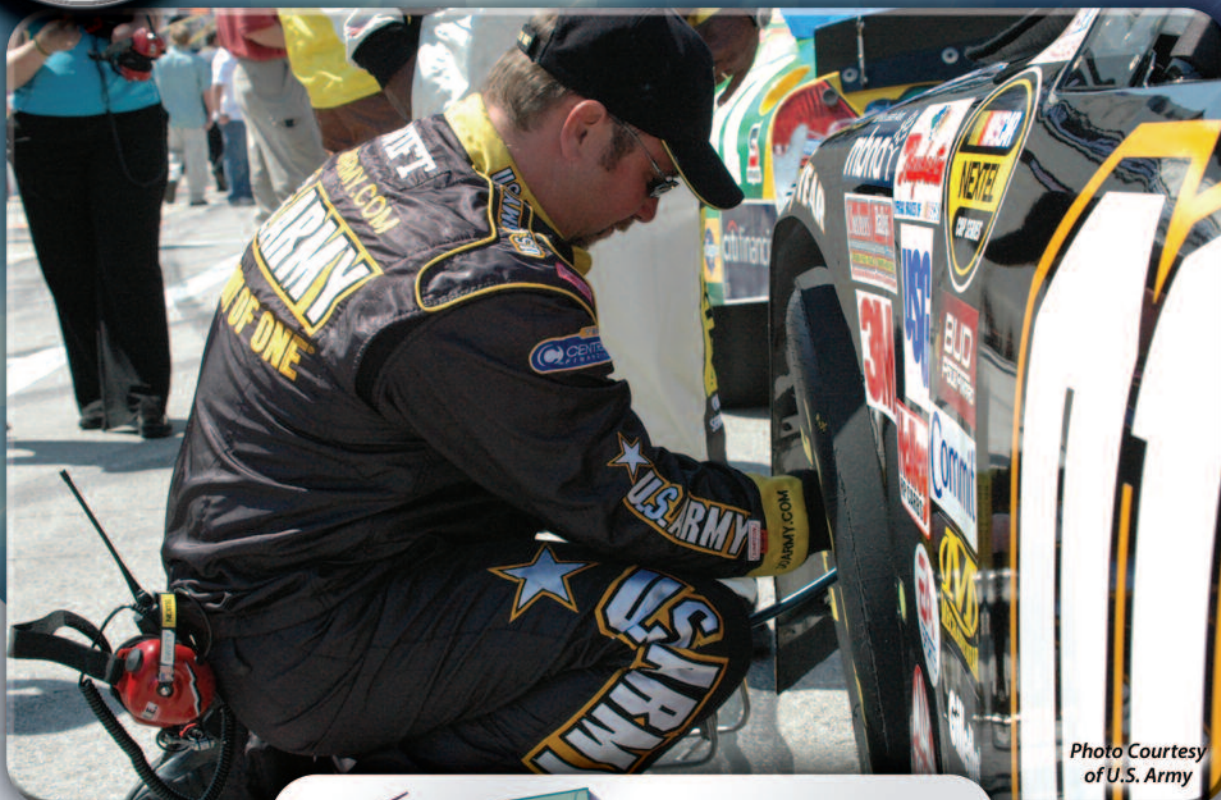


Photo Courtesy
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*Transportation,
Distribution
& Logistics*

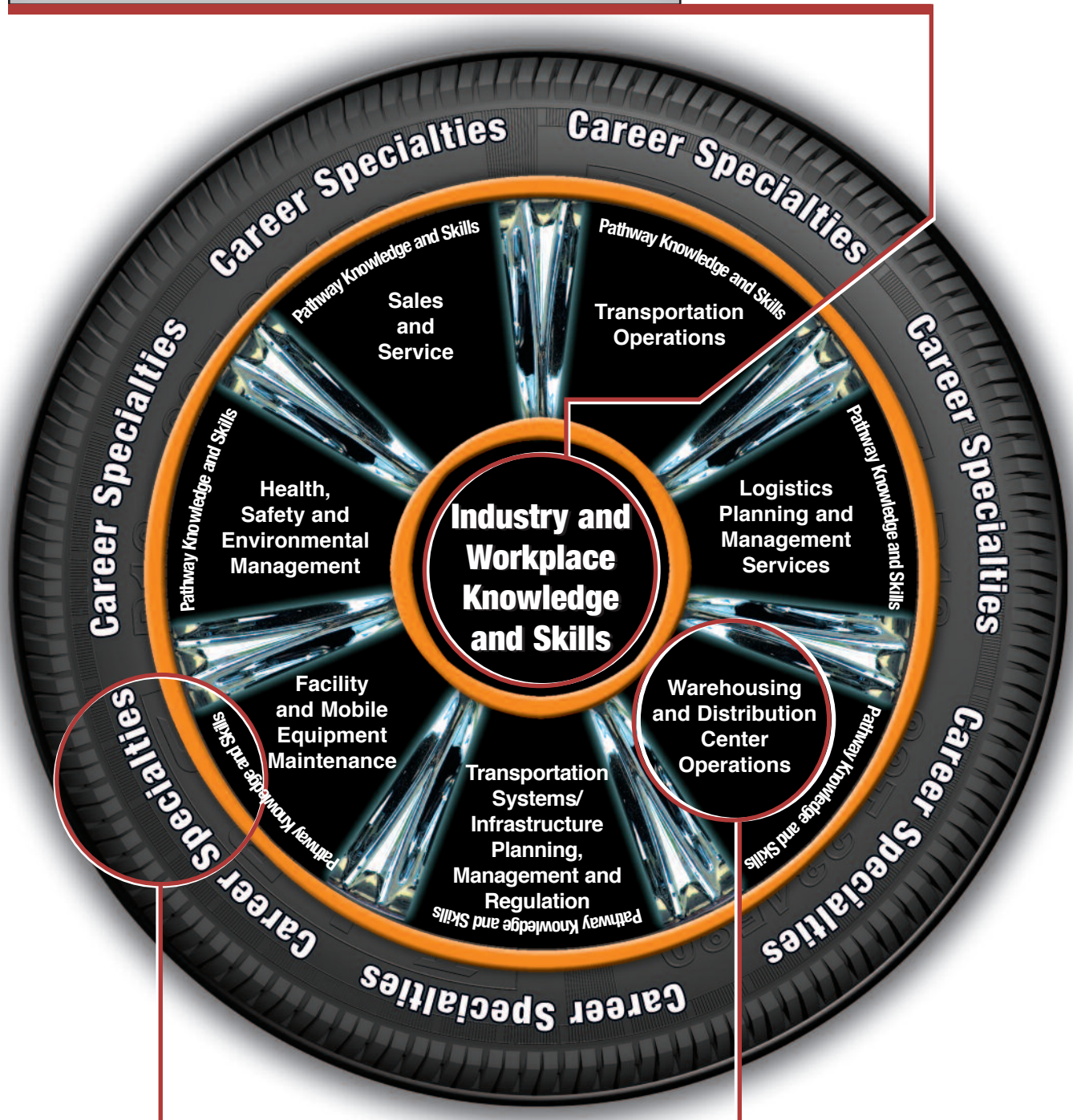
Planning, management and movement of people, materials and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

Career Cluster Guide

2009-2010

CAREER CLUSTER MODEL

Industry and workplace knowledge and skills are taught and reinforced in all pathways and at all levels.



Highly specific career specialty skills are taught at the postsecondary level by colleges, trade schools, apprenticeships or other training options.

High schools offer some or all pathways to students and teach pathway-specific knowledge and skills.

PATHWAY

SPECIFIC OCCUPATIONS

Transportation Operations	Air/Space Transportation: <ul style="list-style-type: none"> • Transportation managers – air • Airplane pilots/copilots • Commercial pilots • Flight engineers • Flight attendants • Dispatchers – air • Traffic managers • Air traffic controllers • Aircraft cargo handling supervisors • Airfield operations specialists • Other airlines operations and support jobs Rail Transportation: <ul style="list-style-type: none"> • Transportation managers – rail • Dispatchers – rail • Traffic managers • Locomotive engineers • Locomotive firers • Railyard conductors and yardmasters • Railroad brake, signal and switch operators (including train crew 	<ul style="list-style-type: none"> members and yard workers) • Railyard engineers, dinkey operators, and hostlers • Other railyard and terminal operations and support jobs Water Transportation: <ul style="list-style-type: none"> • Transportation managers – water • Dispatchers – water • Traffic managers • Captains • Mates • Pilots of water vessels • Sailors and marine oilers • Able seamen • Ordinary seamen • Ship and boat captains • Ship engineers • Motorboat operators • Bridge and lock tenders • Other port/harbor/waterway/marina operations and support jobs Road Transportation: <ul style="list-style-type: none"> • Transportation managers – road 	<ul style="list-style-type: none"> • Dispatchers – Truck/bus/taxi, traffic managers • Truck drivers-heavy • Truck drivers-tractor – trailer • Truck drivers – light or delivery services • Bus drivers – transit and intercity • Bus drivers – school • Taxi drivers and chauffeurs • Truck/bus/taxi terminal operations and support jobs Transit Systems: <ul style="list-style-type: none"> • Transportation managers – mass transit • Dispatchers – bus • Traffic managers • Dispatchers – rail • Traffic managers • Bus drivers – transit and intercity • Subway and streetcar operators • Other
Logistics Planning and Management Services	<ul style="list-style-type: none"> • Logisticians • Logistics managers 	<ul style="list-style-type: none"> • Logistics engineers • Logistics analysts 	<ul style="list-style-type: none"> • Logistics consultants • International logistics
Warehousing and Distribution Center Operations	<ul style="list-style-type: none"> • Warehouse managers • Storage and distribution managers • Industrial and packaging engineers • Traffic, shipping and receiving clerks • Production, planning, expediting clerks 	<ul style="list-style-type: none"> • First-line supervisors/managers of helpers • Laborers and material movers – hand • First-line supervisors/managers of transportation and material-moving machine and vehicle operators 	<ul style="list-style-type: none"> • Laborers and freight, stock and material movers – hand • Car, truck and ship loaders • Packers and packagers – hand • Other packaging/packing/ material handling and moving jobs
Facility and Mobile Equipment Maintenance	Facility: <ul style="list-style-type: none"> • Facility maintenance managers and engineers • Industrial equipment mechanics • Industrial electricians • Electrical/electronic technicians • Other facility/terminal maintenance jobs Mobile Equipment: <u>General</u> <ul style="list-style-type: none"> • Mobile equipment maintenance managers • Electrical and electronic installers and repairers – transportation equipment • Mobile heavy equipment mechanics <u>Air/Space</u> <ul style="list-style-type: none"> • Aerospace engineering and 	<ul style="list-style-type: none"> operations technicians • Aircraft mechanics and service technicians • Airframe mechanics • Power plant mechanics • Aircraft engine specialists • Aircraft body and bonded structure repairers • Avionics technicians <u>Water</u> <ul style="list-style-type: none"> • Motorboat mechanics • Ship mechanics and repairers • Motorboat mechanics • Automotive/truck mechanics and body repairers <u>Rail</u> <ul style="list-style-type: none"> • Rail car repairers • Signal and track switch repairers 	<ul style="list-style-type: none"> • Rail locomotive and car mechanics and repairers <u>Road</u> <ul style="list-style-type: none"> • Electronic equipment installers and repairers – motor vehicle • Automotive body and related repairers • Automotive glass installers and repairers • Automotive service technicians and mechanics • Automotive master mechanics • Automotive specialty technicians • Bus and truck mechanics and diesel engine specialists • Motorcycle mechanics • Bicycle repairers • Tire repairers and changers
Transportation Systems/ Infrastructure Planning, Management and Regulation	<u>General</u> <ul style="list-style-type: none"> • Intermodal – urban and regional planners • Civil engineers • Engineering technicians • Surveying and mapping technicians • Government service executives • Environmental compliance inspectors 	<u>Air/Space</u> <ul style="list-style-type: none"> • Air traffic controllers • Aviation inspectors <u>Road</u> <ul style="list-style-type: none"> • Traffic engineers • Traffic technicians • Motor vehicle inspectors • Freight inspectors <u>Rail</u> <ul style="list-style-type: none"> • Railroad inspectors 	<u>Water</u> <ul style="list-style-type: none"> • Marine cargo inspectors • Vessel traffic control specialists <u>Transit</u> <ul style="list-style-type: none"> • Public transportation inspectors <u>Other</u> <ul style="list-style-type: none"> • Other government agency managers • Regulators • Inspectors, other federal/state/local transportation agency jobs
Health, Safety and Environmental Management	<ul style="list-style-type: none"> • Health and safety managers • Industrial health and safety engineers • Environmental scientists and specialists 	<ul style="list-style-type: none"> • Environmental science and protection technicians • Environmental managers and engineers 	<ul style="list-style-type: none"> • Environmental compliance inspectors • Safety analysts
Sales and Service	<ul style="list-style-type: none"> • Marketing managers • Sales managers • Sales representatives – transportation/logistics services 	<ul style="list-style-type: none"> • Reservation, travel and transportation agents/clerks • Cargo and freight agents • Customer service managers 	<ul style="list-style-type: none"> • Customer service representatives • Customer order and billing clerks • Cashiers, counter and rental clerks

Wyoming's Highest-Paying, Fastest-Growing Jobs

Title	Basic Description O*NET/SOC Description (may be truncated)	Anticipated Total 2014 Employment	
Source: See footnote #1	Source: See footnote #1	Source: See footnote #1	
Automotive service technicians and mechanics	Diagnose, adjust, repair, or overhaul automotive vehicles.	2,146	
Bus drivers, school	Transport students or special clients, such as the elderly or persons with disabilities.	1,488	
Driver/sales workers	Drive truck or other vehicle over established routes or within an established territory and sell goods, such as food products, including restaurant take-out items, or pick up and deliver items, such as laundry.	1,820	
Electrical power-line installers and repairers	Install or repair cables or wires used in electrical power or distribution systems.	842	
First-line supervisors/managers of mechanics, installers, and repairers	Supervise and coordinate the activities of mechanics, installers, and repairers.	1,528	
Industrial machinery mechanics	Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems.	1,268	
Industrial truck and tractor operators	Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.	905	
Laborers and freight, stock, and material movers, hand	Manually move freight, stock, or other materials or perform other unskilled general labor.	4,164	
Locomotive engineers and operators	Drive electric, diesel-electric, steam, or gas-turbine-electric locomotives to transport passengers or freight. Interpret train orders, electronic or manual signals, and railroad rules and regulations.	174	
Maintenance workers, machinery	Lubricate machinery, change parts, or perform other routine machinery maintenance.	516	
Transportation, storage, and distribution managers	Plan, direct, or coordinate transportation, storage, or distribution activities in accordance with governmental policies and regulations. Includes logistics managers.	198	
Truck drivers, heavy and tractor-trailer	Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form.	8,499	
Truck drivers, light or delivery services	Drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area.	2,198	

1. Source: doe.state.wy.us/lmi
2. Source: www.careerinfonet.org

TRANSPORTATION, DISTRIBUTION & LOGISTICS

	Wyoming Number of New Jobs, Projected 2004-2014	Wyoming Estimated Hourly Average Wage	Wyoming Estimated Yearly Wage	Most Common Education/ Training	Suggested Programs of Study	Is at least one of these programs available in Wyoming?
	Source: See footnote #1	Source: See footnote #1		Source: See footnote #2	Source: See footnote #2	
	457	\$16.55	\$34,428	Postsecondary vocational award	<ul style="list-style-type: none"> • Alternative Fuel Vehicle Technology • Automobile/Automotive Mechanics Technology • Automotive Engineering Technology • Medium/Heavy Vehicle and Truck Technology • Vehicle Emissions Inspection and Maintenance Technology 	Yes
	180	\$12.23	\$25,434	Moderate-term on-the-job training	<ul style="list-style-type: none"> • Truck and Bus Driver/Commercial Vehicle Operation 	Yes
	230	\$10.32	\$21,477	Short-term on-the-job training	<ul style="list-style-type: none"> • Retailing and Retail Operations 	Yes
	194	\$23.45	\$48,771	Long-term on-the-job training	<ul style="list-style-type: none"> • Electrical and Power Transmission Installation • Electrical and Power Transmission Installers • Line Worker 	Yes
	331	\$27.99	\$58,216	Work experience in related occupation	<ul style="list-style-type: none"> • Operations Management and Supervision 	Yes
	341	\$25.27	\$52,562	Long-term on-the-job training	<ul style="list-style-type: none"> • Apprenticeship Programs • Heavy/Industrial Equipment Maintenance Technologies • Industrial Mechanics and Maintenance Technology 	Yes
	276	\$16.01	\$33,306	Short-term on-the-job training	<ul style="list-style-type: none"> • Ground Transportation 	Yes
	1,373	\$11.78	\$24,500	Short-term on-the-job training	No information about "Instructional Programs" for this occupation is available.	Yes
	71	\$39.36	\$81,870	Moderate-term on-the-job training	<ul style="list-style-type: none"> • Transportation and Materials Moving 	Yes
	95	\$28.40	\$59,077	Moderate-term on-the-job training	<ul style="list-style-type: none"> • Heavy/Industrial Equipment Maintenance Technologies • Industrial Mechanics and Maintenance Technology 	Yes
	50	\$43.85	\$91,217	Work experience in related occupation	<ul style="list-style-type: none"> • Business Administration and Management • Business/Commerce Logistics and Materials • Public Administration • Aviation/Airway Management and Operations 	Yes
	2,410	\$17.90	\$37,230	Moderate-term on-the-job training	<ul style="list-style-type: none"> • Truck and Bus Driver/Commercial Vehicle Operation 	Yes
	611	\$14.18	\$29,494	Short-term on-the-job training	<ul style="list-style-type: none"> • Truck and Bus Driver/Commercial Vehicle Operation 	Yes

For additional information and resources, go to:
http://www.wyomingworkforce.org/resources/links_career.aspx

PROGRAMS OF STUDY

WYOMING COMMUNITY COLLEGES

TRANSPORTATION, DISTRIBUTION & LOGISTICS

Casper College

Central Wyoming College

Eastern Wyoming College

Laramie County
Community College

Northwest College

Northern Wyoming
Community College District

Western Wyoming
Community College

MAJORS

AS - Associate of Sciences
AA - Associate of Arts
AAS - Associate of Applied Sciences
C - Certificate

Auto Body Repair

Auto Body Repair Technology

Auto Parts Management

Auto Technology – General Option

Auto Technology – Parts Specialist Option

Auto Technology – Power Sports

Automotive Technology

Aviation

Business Administration

Business Management

Commercial Driver's License (CDL)

Compression Technology

Construction

Construction Technology

Counter Part Sales

Customer Service – Business Environment

Customer Service – Business Skills

Customer Service – Computer Skills

Customer Service – Contact Skills

Customer Service – Specialist

Diesel and Heavy Equipment Maintenance and Repair

Diesel and Heavy Equipment Mechanic

Diesel Power Technology

Diesel Technology

Diesel Technology with CDL

Drafting

Emergency Services – Paramedic

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Northern Wyoming
Community College District

Western Wyoming
Community College

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AA - Associate of Arts
AAS - Associate of Applied Sciences
C - Certificate

Engineering
Engineering Science
Engineering Technology
Engineering Technology – Drafting and Design, General
Environmental Science
Fundamentals of Integrated Systems Technology
General Studies in Business
Industrial Safety
MIG Welding
Oil and Gas Production Technician
Paramedics – Emergency Management
Plant Operations
Power Plant Maintenance Mechanics
Public Administration
Rail Car Repair
Sheet Metal Apprentice
Surface Maintenance Mechanics
Technical Studies
TIG Welding
Tractor Trailer
Water Quality Technology
Welding
Welding and Joining Technology
Welding Technology – Fabrication Shop Option
Welding Technology – Industrial Plant Option
Welding Technology – Mine Maintenance Option
Welding Technology

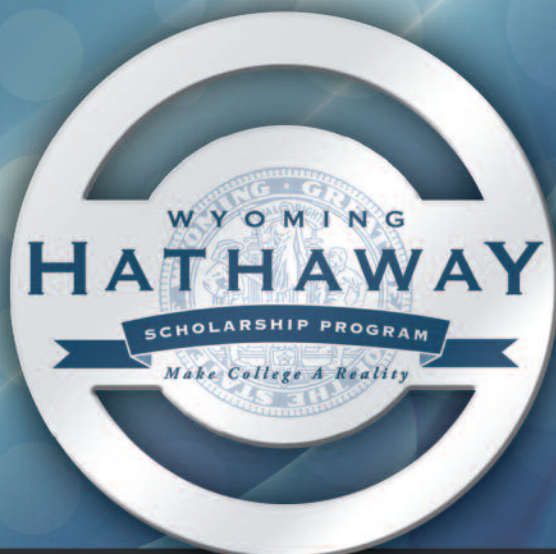
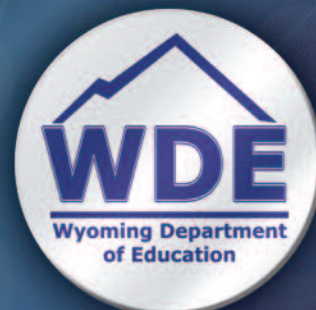
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UNIVERSITY OF WYOMING

COLLEGE OF ARTS AND SCIENCES		Bachelor's	Master's	Doctorate
MAJORS	Math	●	●	●
	Planning – Community and Rural	●	●	●
	Statistics	●	●	●
	Accounting	●	●	●
	Business Economics	●	●	●
	Economics	●	●	●
	Finance	●	●	●
	Management	●	●	●
	Marketing	●	●	●
COLLEGE OF ENGINEERING		Bachelor's	Master's	Doctorate
MAJORS	Architectural Engineering	●	●	●
	Civil Engineering	●	●	●
	Computer Science	●	●	●
	Computer Science – Professional	●	●	●
	Management Information Systems	●	●	●
	Management Information Systems – Business	●	●	●
	Management Information Systems – Computer Science	●	●	●
	Mechanical Engineering	●	●	●
	Petroleum Engineering	●	●	●

Degree: An award conferred by a college or university signifying that the recipient has satisfactorily completed a defined academic or vocational-technical program of study: Associate of Arts, Associate of Science, Associate of Applied Science, Bachelor of Arts, or Bachelor of Science.

Certificate: An official document issued to a student by a college or university attesting to the training, aptitude and/or qualification gained from the satisfactory completion of a defined program of study. Credit hours vary from 0 to 60 credit hours and are awarded for attendance or specific skills gained. (Attendance requirements vary from one hour to two years of study, depending upon program requirements.)



Notice

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Future versions of the Wyoming Career Cluster Guides and accompanying Planning Guide may be modified in terms of content and format based upon user input. Please direct all suggestions and inquiries in writing to:

Career Cluster Coordinator
Wyoming Department of Education
2300 Capitol Avenue
Hathaway Building, 2nd Floor
Cheyenne, WY 82002-0050



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for Civil Rights Coordinator, 2300 Capitol Ave., Cheyenne, WY 82002-0050 or 307-777-7673, or the Office of Civil Rights, Region VIII, U. S. Department of Education, Federal Building, Suite 310, 1244 Speer Boulevard, Denver, CO 80204-3582, or 303-844-5695 or TDD 303-844-3417. This information will be provided in an alternative format upon request.



States' Career Clusters Initiative 2006
www.careerclusters.org